

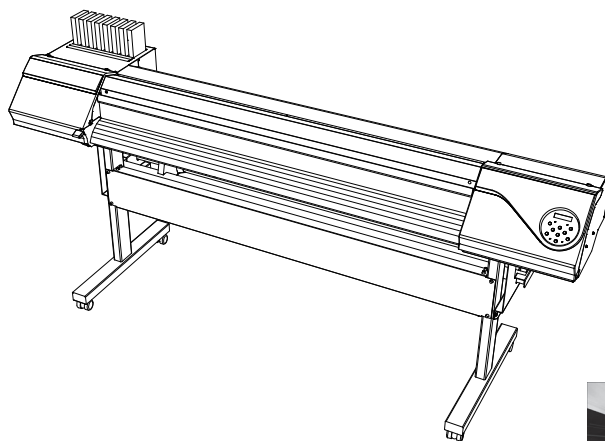
# ***VS-640 VS-420*** ***VS-540 VS-300***

## **SPECIAL COLOR INK GUIDE**

### **( Metallic Silver & White )**

When you use metallic silver ink and white ink, be sure to read this first.

This document describes the characteristics of special color inks (white ink and metallic silver ink) for VS-640/540/420/300, the important notes on the usage of these inks, and the maintenance and printing method in using these inks. For other information, refer to the VS-640/540/420/300 Setup Guide and User's Manual.



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## 2-2 Printer Preparations

### Making the Printer Settings and Loading Media

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#### When Using Transparent Media

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When you are using transparent media, make the necessary printing settings on the printer and load the media accordingly.

#### Procedure

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- 1 Press  and make the following settings.**  
[EDGE DETECTION] to "DISABLE."
- 2 Load transparent media into the printer.**
  - When the media warps or partially floats, ensure a margin of about 200 mm from the leading edge of the media to the printing- or cutting-start location.
  - Be sure to use the media clamps when you load media.

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#### When Using Media Other Than Transparent Media

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Load the media using the method described in the User's Manual.

## Blend Print and Layered Print (Metallic Silver and CMYKLcLm)

Using the metallic silver ink, you can perform the blend print and the layered print by combining the ink with the CMYKLcLm ink. By this means, you can realize the metallic expressions that cannot be made only with the CMYKLcLm ink. The printing methods are different between the blend print and the layered print, and so are the metallic impressions of the CMYKLcLm colors. Select and use the types of printing to suit your taste.

⇒ P. 22, "Blend Print (Metallic Silver + CMYKLcLm)," p. 24, "Layered Print (Metallic Silver ⇒ CMYKLcLm)," p. 26, "Layered Print (CMYKLcLm ⇒ Metallic Silver)"

\* When you perform "Printing with White, Metallic Silver, and CMYK Ink" (page 30), the printing method is limited to the blend print.

### POINT!

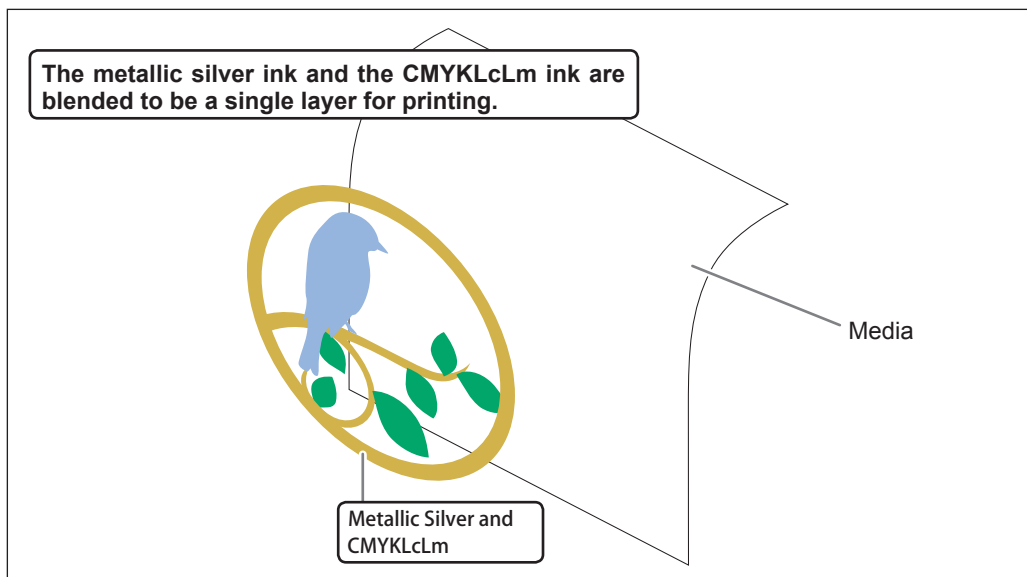
In performing the blend print or the layered print, you can specify the colors from the metallic color special colors library. However, if you specify the metallic colors with the same names for the blend print and the layered print, the tones of the colors are different between them. We recommend that you check the tones of the colors by performing the test printing or printing out the Metallic Color Chart.

Seeing the metallic color chart for the layered print, you may feel a slight inconsistency between the names and the tones of the colors. This is because the colors listed in the Metallic Color Chart are named based on those for the blend print.

⇒ P. 36, "Printing a Metallic Color Chart"

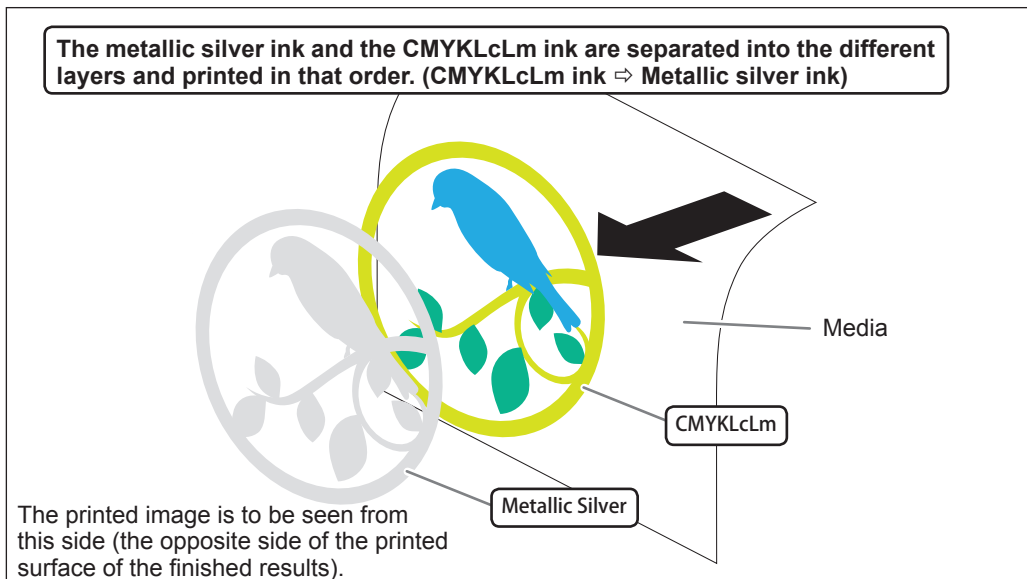
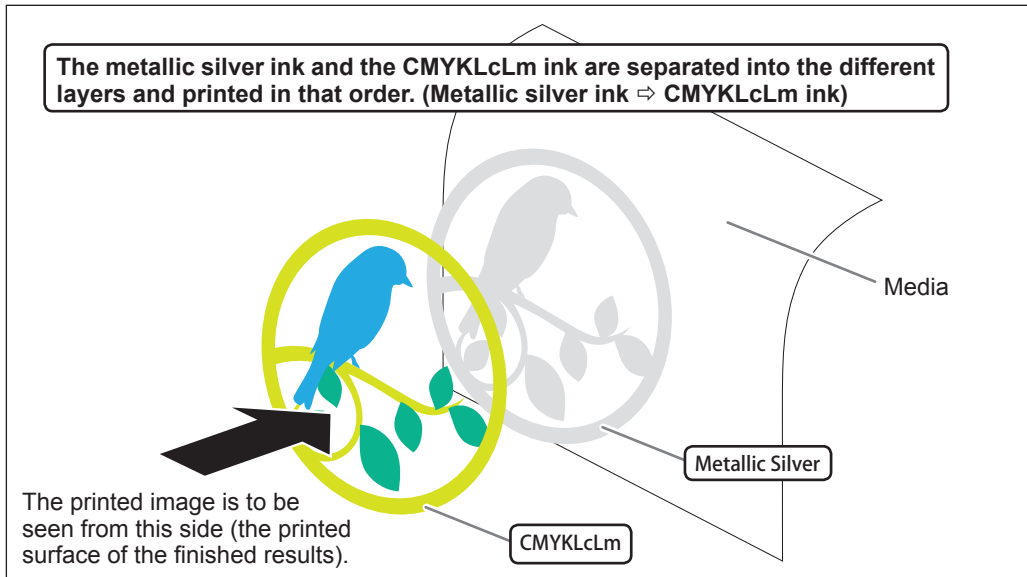
## Blend Print

(Image of printing method)



## Layered Print

(Image of printing method)



# Chapter 3

## Printing

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## Blend Print (Metallic Silver + CMYKLcLm)

This section describes how to perform the blend print with the metallic silver ink and CMYKLcLm ink.

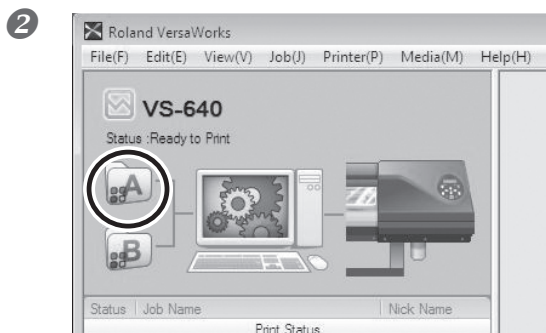
☞ P. 16, "Blend Print and Layered Print (Metallic Silver and CMYKLcLm)"

To perform the blend print, you need to use the printing data where the use of the metallic silver ink and the CMYKLcLm ink is designated.

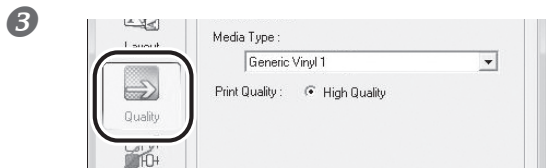
☞ P. 10, "2-3 Creating Printing Data"

### Procedure

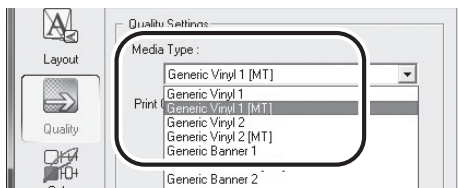
- 1 **Make sure that you have finished making the preparations for VersaWorks, getting the printer ready, and creating the printing data (☞ page 7, "Chapter 2 -- Getting Ready").**



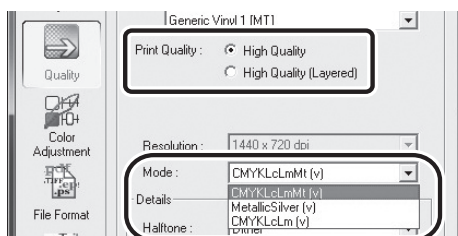
**Double-click** .  
Queue A Properties" window appears.



**Click** .



**For [Media Type], select names with [MT] attached such as "Generic Vinyl 1 [MT]".**  
Make the selection that matches the media to be used. Selecting an item attached with [MT] enables you to choose the print mode that can use the metallic silver ink.



**For [Print Quality], select [High Quality].**

**For [Mode], select [CMYKLcLmMt (v)].**



## Layered Print (Metallic Silver ⇨ CMYKLcLm)

This section describes how to perform the layered print with the metallic silver ink and CMYKLcLm ink using the metallic silver ink as background.

⇨ P. 16, "Blend Print and Layered Print (Metallic Silver and CMYKLcLm)"

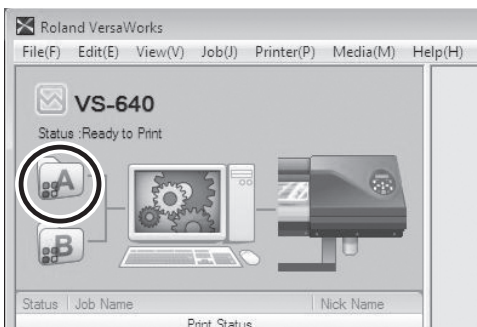
To perform the layered print, you need to use the printing data where the use of the metallic silver ink and the CMYKLcLm ink is designated.

⇨ P. 10, "2-3 Creating Printing Data"

### Procedure

- 1 **Make sure that you have finished making the preparations for VersaWorks, getting the printer ready, and creating the printing data (⇨ page 7, "Chapter 2 -- Getting Ready").**

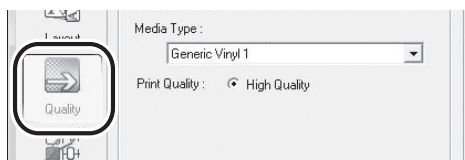
2



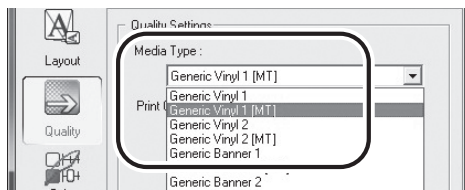
Double-click .

"Queue A Properties" window appears.

3



Click .



**For [Media Type], select names with [MT] attached such as "Generic Vinyl 1 [MT]".**

Make the selection that matches the media to be used. Selecting an item attached with [MT] enables you to choose the print mode that can use the metallic silver ink.



**For [Print Quality], select [High Quality (Layered)].**

If [Mode] is selectable, select [Mt -> CMYKLcLm (v)].

## Layered Print (CMYKLcLm ⇨ Metallic Silver)

This section describes how to perform the layered print with the metallic silver ink and CMYKLcLm ink using the CMYKLcLm ink as background.

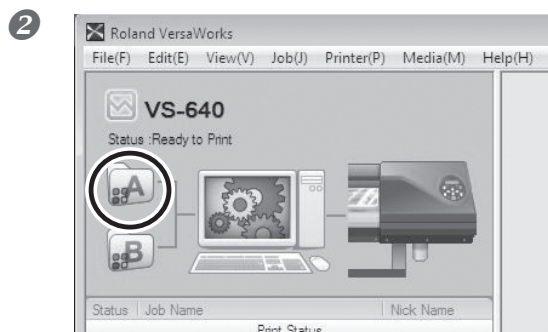
⇨ P. 16, "Blend Print and Layered Print (Metallic Silver and CMYKLcLm)"

To perform the layered print, you need to use the printing data where the use of the metallic silver ink and the CMYKLcLm ink is designated.

⇨ P. 10, "2-3 Creating Printing Data"

### Procedure

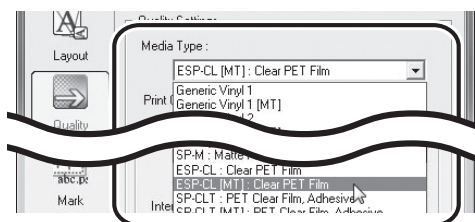
- 1 **Make sure that you have finished making the preparations for VersaWorks, getting the printer ready, and creating the printing data (⇨ page 7, "Chapter 2 -- Getting Ready").**



**Double-click** .  
Queue A Properties" window appears.

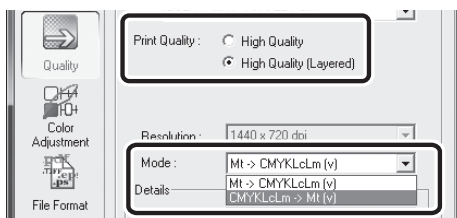


**Click** .



For [Media Type], select "xxx[MT]: Clear PET Film" or "xxx[MT]: PET Clear Film, Adhesive" (or xxx: Clear PET Film," "xxx: PET Clear Film, Adhesive).

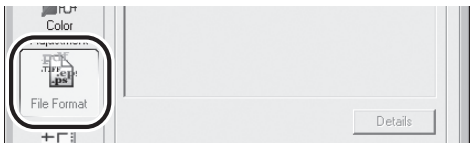
\* "xxx" indicates "ESP-CL" and others.



For [Print Quality], select [High Quality (Layered)].

For [Mode], select [CMYKLcLm -> Mt (v)].

4

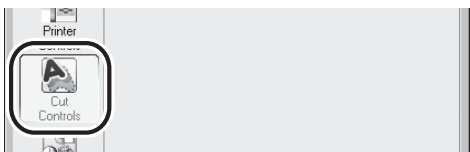


Click  .

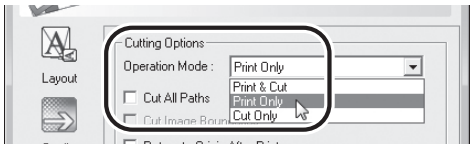


Turn on the [Convert Spot Color] option.

5

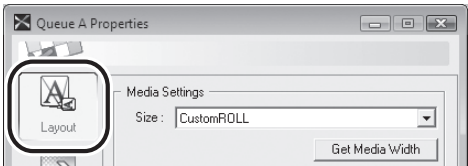


Click  .



In [Operation Mode], select the operation of the printer.

**When You Want to Display the Side Opposite the Printed Surface by Using Clear Film.**

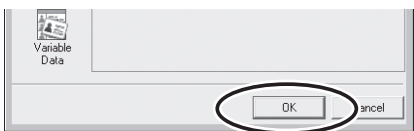


Click  .



**Turn on the [Mirror] option.**  
When the printing data with mirror image is prepared beforehand, you do not need to turn on this option.

6



Click [OK] to close the "Queue A Properties" window.

This is the end of the print job setting. To start printing, go on to page 35 "Starting the Print Operation."

Only the settings necessary for the use of the metallic silver ink are described in this section. For other settings, refer to the online help provided for VersaWorks.

# Printing with White and CMYKLcLm Ink

This section describes how to perform printing with the white ink and the CMYKLcLm ink. Deciding which ink between the white and the CMYKLcLm you want to use for the base is an important point in determining the print job setting here. To use the white ink for printing, you need to use the printing data where the use of the white ink is designated.

☞ P. 10, "2-3 Creating Printing Data"

## Procedure

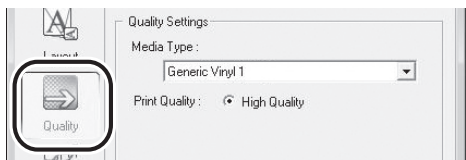
**1** Make sure that you have finished making the preparations for VersaWorks, getting the printer ready, and creating the printing data (☞ page 7, "Chapter 2 -- Getting Ready").

**2**

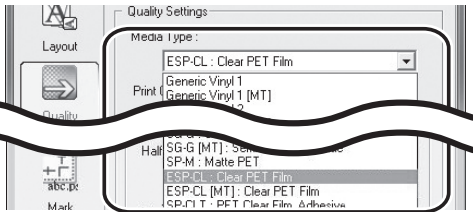


Double-click .  
"Queue A Properties" window appears.

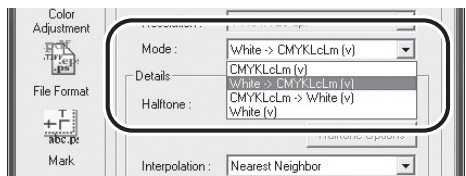
**3**



Click .



For [Media Type], select "xxx: Clear PET Film" or "xxx: PET Clear Film, Adhesive."  
"xxx" indicates "ESP-CL" and others.



With [Mode], select the print mode.  
**White -> CMYKLcLm (v)**

Inks are overprinted in the sequence of white and then CMYKLcLm Color.

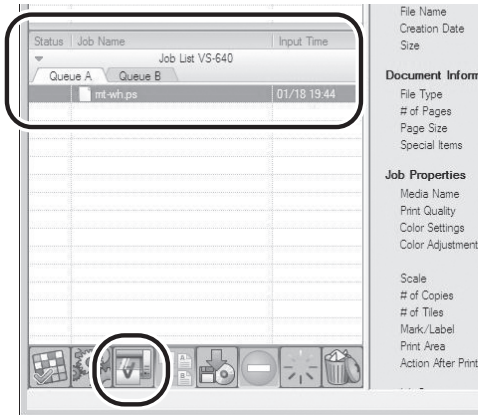
**CMYKLcLm -> White (v)**


Inks are overprinted in the sequence of CMYKLcLm and then white Color.

\* The image of overprinting in the sequence of white and CMYKLcLm is the same as that of overprinting in the sequence of white and metallic silver/CMYK on page 31. (The description of "metallic silver/CMYK" is to be replaced with "CMYKLcLm" only.)

## 3-2 Starting the Print Operation

3



Select the print job in the job list, and then click .

Printing will be started.

### Tips!

After printing, allow the ink to dry sufficiently. We strongly recommend performing lamination.

### Tips!

To continue printing similar data, repeat steps 2 and 3. Also, if you want to modify detailed settings for each job, it will be convenient to perform modifications in the "Job Setting" window (which you can display by double-clicking the print job in the job list).

## Printing a Metallic Color Chart

The Metallic Color Chart is the printing sample of the special metallic color. By printing the Metallic Color Chart, you can confirm the "complete metallic color chart" representing the special metallic color itself that can be printed with "Your Printer" and "Your Media" (slight pattern differences is possible to occur depending on the conditions of the printer and media.) By selecting colors from this color chart and creating illustrations with these colors, you can accurately reproduce the desired colors..

### Procedure

1 Make sure that you have finished making the preparations for VersaWorks, and getting the printer ready (☞ page 7, "Chapter 2 -- Getting Ready").

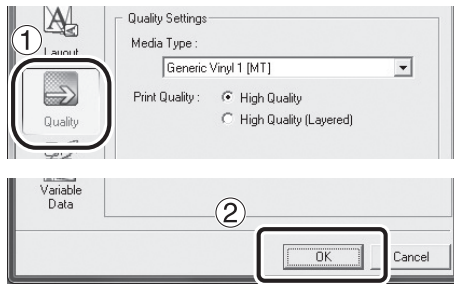
2



Double-click .

"Queue A Properties" window appears.

3



Click , configure the settings in [Quality-Settings] and [Color Management].

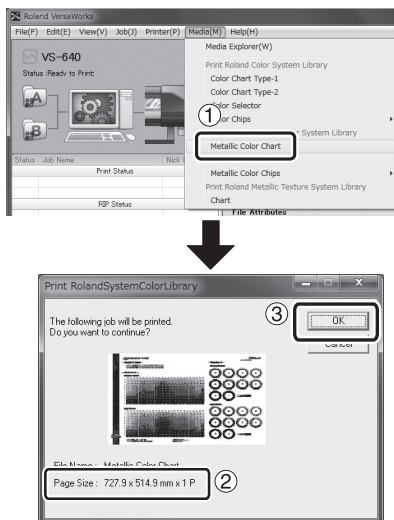
☞ P. 20, "3-1 Print Job Setting"

Click [OK].

### POINT!

When printing a Metallic Color Chart, the [Quality] settings from the [Queue Properties] window are always applied. Since you cannot change the quality settings for the job using the [Job Settings] window after it has been added, be sure to configure the settings in the [Queue Properties] window before performing the following operations.

4



① Click [Media] and then [Metallic Color Chart].

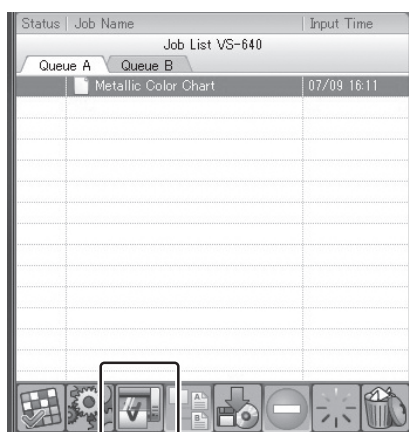
② Check the page size.

If the size of the media loaded on the printer is not adequate for the page size, change it to another media of sufficient size.

③ Click [OK].

The print job of the Metallic Color Chart is added to the job list.

5



Click .

Printing will be started.

# ***Chapter 4***

## ***Advanced***

---

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# 4-1 Performing Texture Printing

## What is Texture Printing?

Texture printing is a printing method to produce texture patterns. This uses the texture patterns of the exclusive library to create and output the printing data. This document describes the texture printing using metallic silver ink.

- \* Create the printing data using the Adobe Illustrator version of CS or later if using Adobe Illustrator. If you use the earlier version before Adobe Illustrator 10 to create the printing data, the texture patterns may result in poor condition.

## Create The Texture Printing Data

To create the data for the texture printing, please follow the instructions below.

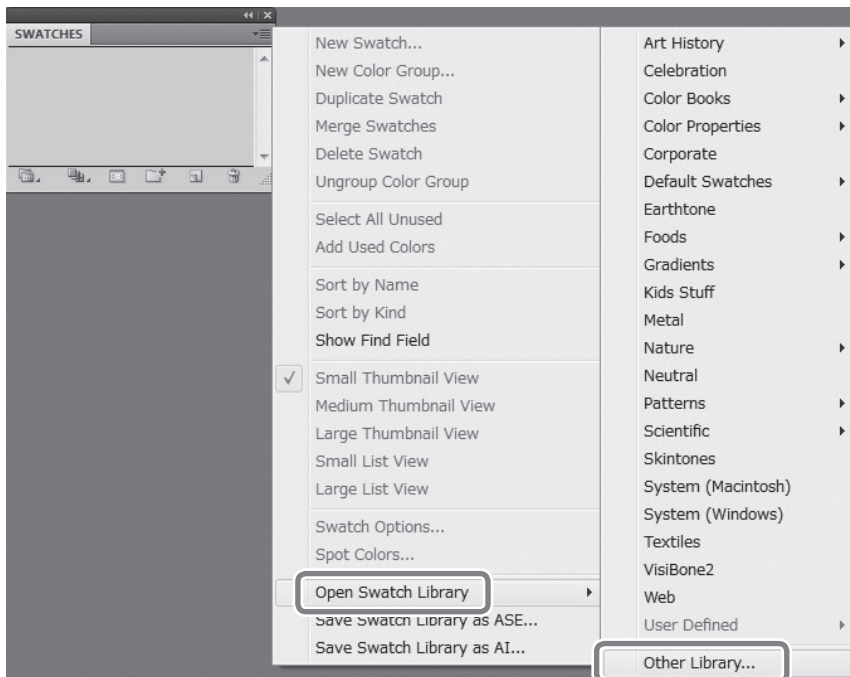
The program used to create the printing data is Adobe Illustrator CS4. For detailed information on drawing methods and how to work with palettes, refer to the documentation or online help for Adobe Illustrator CS4. If you're using another version of Adobe Illustrator, operations may be somewhat different from those explained here.

### 1. Open the exclusive library.

- 1** At the swatch palette menu, select [Open Swatch Library], then [Other Libraries].

The "Select Library" window appears.

- \* The swatch palette is displayed by going to the menu and selecting [Window], then [Swatch].



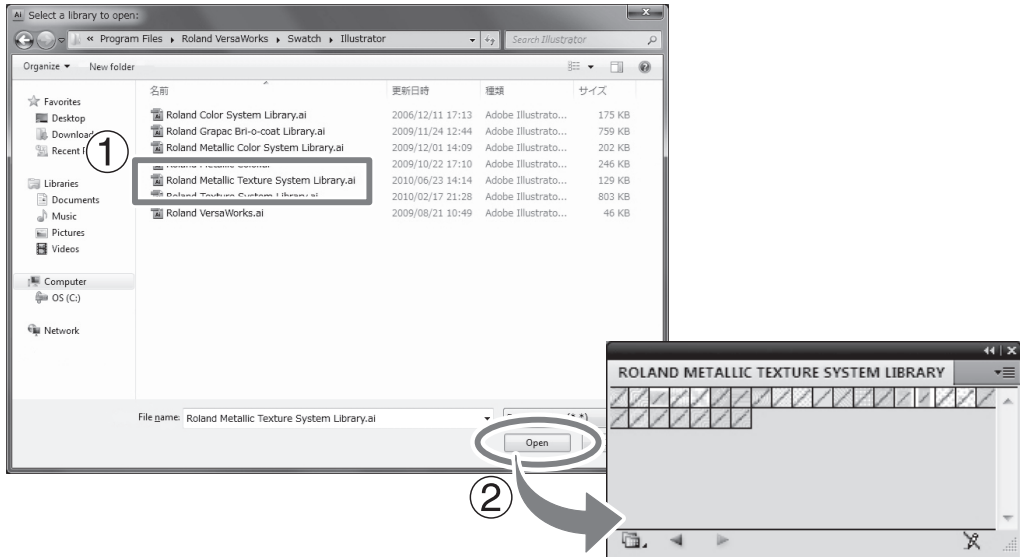


- 2** ① Open folder in the order of [Computer] (or [My Computer]) → [Local Disk (C:)] → [Program Files] → [Roland VersaWorks] → [Swatch] → [Illustrator], and then select "Roland Metallic Texture System Library.ai."

Depending on the settings of your computer, the extension ".ai" might not be shown.

- ② Click [Open].

The exclusive swatch libraries "Roland Metallic Texture System Library.ai" is displayed.



### Tips!

By saving the ".ai" file selected in step **2** into the folder below, you can register the exclusive library to the Adobe Illustrator's library.

C:\Program Files\Adobe\Adobe Illustrator CS4\Preset\Swatch  
("C" is the name of your computer's local disk.)

Once the registration is performed, you can open the library directly from the swatch palette menu, eliminating the need to search the file every time you start Adobe Illustrator.

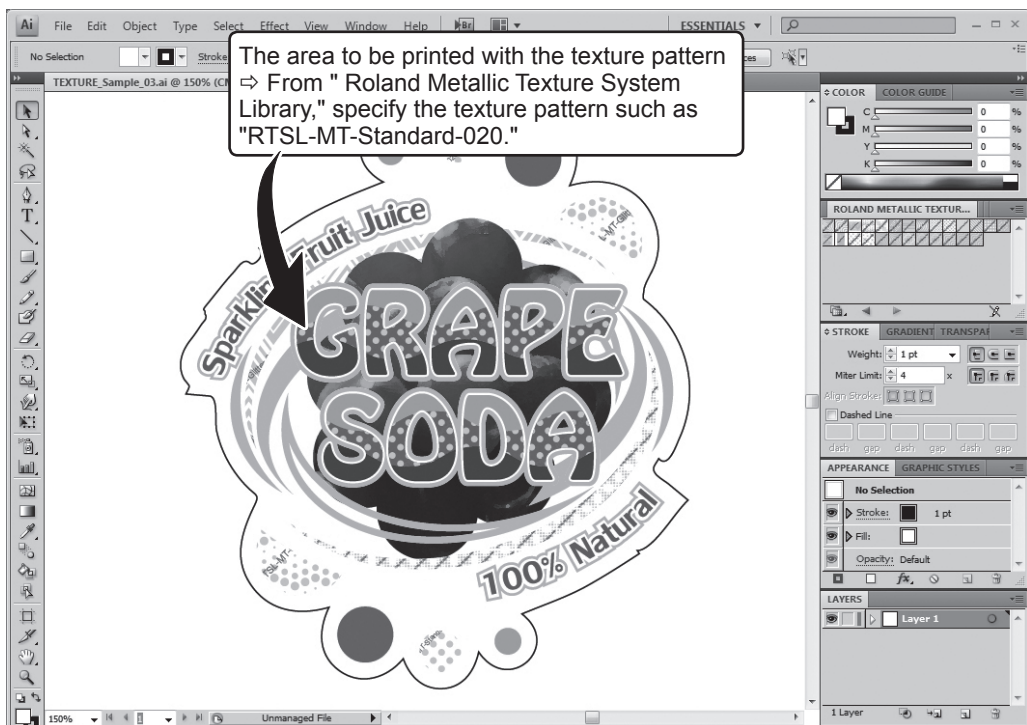
### 2. Create Illustrations and Specify Texture Patterns You Wish to Use

#### 1 Create the illustration.

Be sure to draw the illustration in the CMYK mode.

#### 2 Assign the desired texture patterns to the areas for the texture printing.

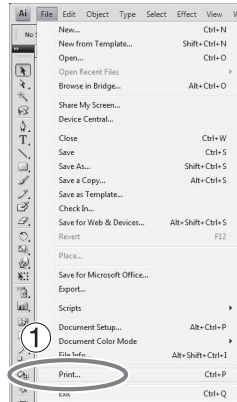
The areas where the texture patterns are assigned shall be printed with metallic silver ink. When the metallic silver ink is to be used for the printings other than the texture printing, other special spot colors shall be used. For the detailed usage, please refer to "Chapter 2 Getting Ready".



- \* The name of the texture pattern is displayed on the data of Illustrator. The texture of the displayed image appears rougher than that of the actual print.

### 3. Create the PS (PostScript) file.

1

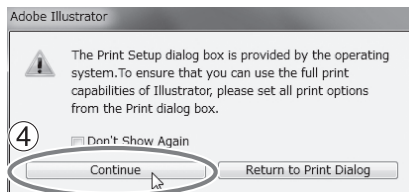
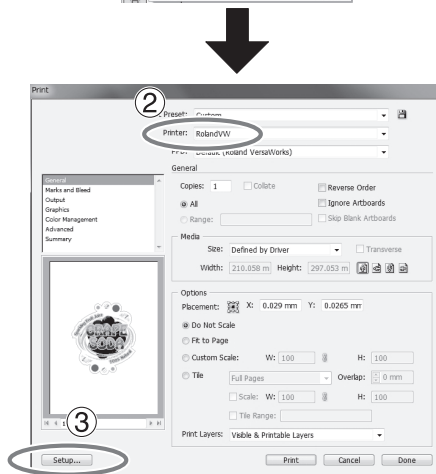


① Click [Print] from the [File] menu.

② Select [Roland VW].

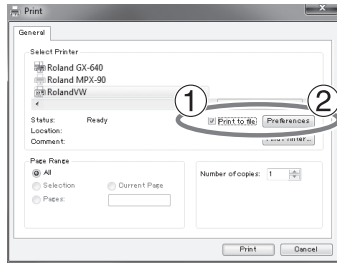
③ Click [Setup].

④ Click [Continue].



## 4-1 Performing Texture Printing

2



① Turn on the [Print to file] option.

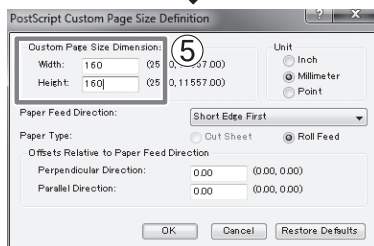
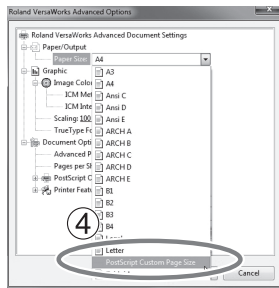
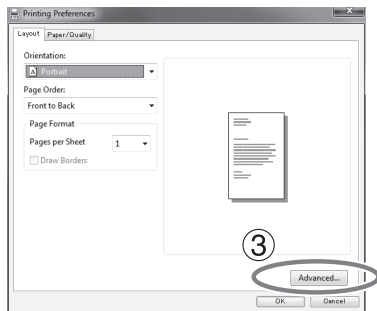
② Click [Preferences].

③ Click [Advanced] in the [Layout] tab. For Windows 2000: In the "Print" dialog box (the window at the very top of this page), go to the "Layout" tab and click [Advanced].

④ Click the down arrow to the right of the [Paper Size] box, and then click [PostScript Custom Page Size] from the list that appears.

⑤ For "Custom Page Size Definition," enter the values in the "Width" and "Height" fields.

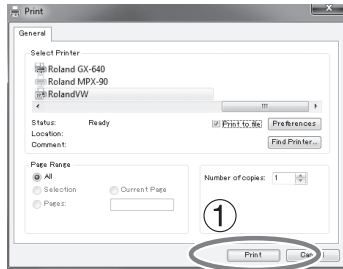
Enter values for the same size as the illustration you created in step 2.



③ Click [OK] three times to close the "PostScript Custom Page Size Definition," "Roland VersaWorks Advanced Options," and "Printing Preferences" dialog boxes.

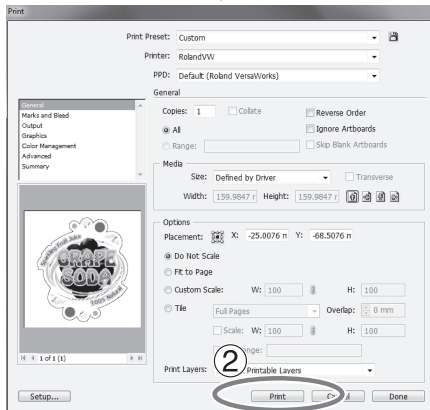
The "Print" dialog box returns.

4

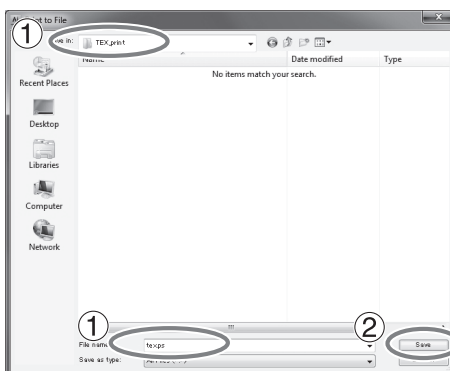


① Click [Print].

② Click [Print].



5



① Specify the destination and file name for saving, then save the file.

Example: "TEX\_print" for the folder to save to, and "tex.ps" as the file name

② Click [Save].

The CMYK layer of the image is saved as a PS file.

⑥ Open the folder you saved to and make sure the file has been created.

## Performing Texture Printing

### Procedure

① Prepare the printing data having been created in the previous process which is described in "Create The Texture Printing Data" on page 40.

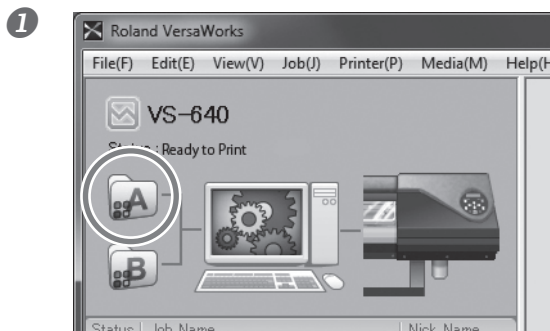
### ② Make the setting to output metallic silver ink with the VersaWorks, and execute the printing.

To use metallic silver ink, you need to select "CMYKMt" or "CMYKLcLmMt" in the print mode of the VersaWorks. For the detailed method of setting, please refer to "Chapter 3 Printing".

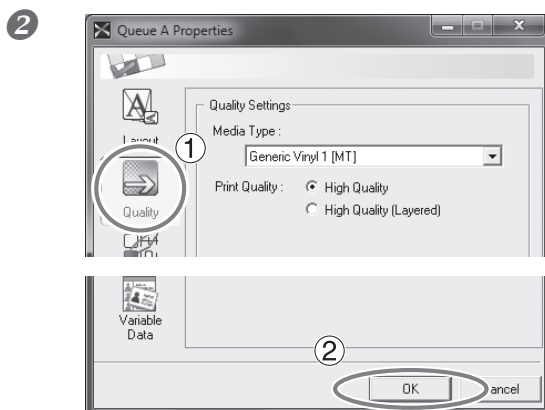
## Printing a Texture Chart

The texture chart is the printing sample of the texture pattern. By printing the texture chart, you can confirm the "complete texture chart" representing the texture itself that can be printed with "Your Printer" and "Your Media" (slight pattern differences is possible to occur depending on the conditions of the printer and media.) By selecting a pattern from this texture chart and creating the printing data using that selected pattern, you can print your intended pattern almost perfectly. (The procedure is explained using the windows of the VS-640.)

### procedure



**Double-click** .  
The [Queue A Properties] window appears.

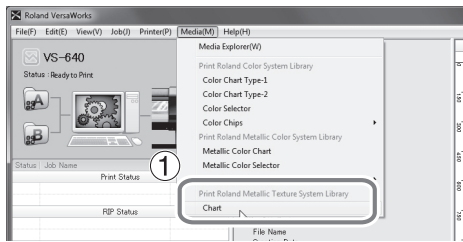


① Click , configure the settings in [Quality Settings] and [Color Management].

② Click [OK].

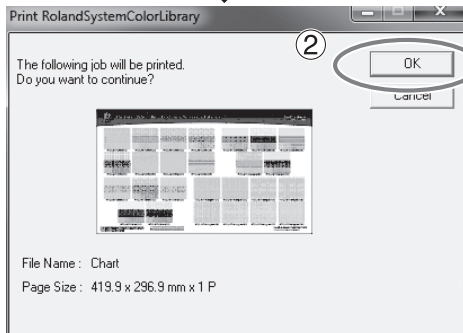
Note: When printing a texture chart, the [Quality] settings from the [Queue Properties] window are always applied. Since you cannot change the quality settings for the job using the [Job Settings] window after it has been added, be sure to configure the settings in the [Queue Properties] window before performing the following operations.

3



① Click **[Chart]** under **[Print Roland Texture System Library]** from the **[Media]** menu.

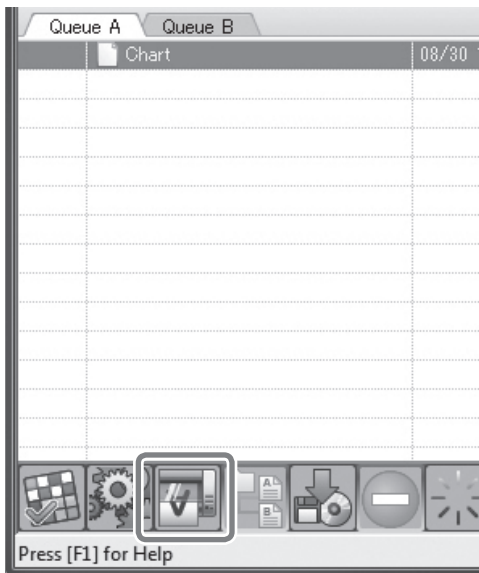
This message appears: The following job will be printed. Do you want to continue? Check that the media in the printer is large enough for the displayed page size.



② Click **[OK]**.

The texture chart is added to the job list.

4



Click .

Rip'ing and printing the texture chart are performed.

\* In the texture chart, color is added to part of the background of the texture. This makes the design of the texture clear.

# ***Chapter 5***

## ***Maintenance***

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# 5-1 Maintenance

## Message for Ink Circulation

With this machine, white ink and metallic silver ink are circulated periodically to prevent the ink precipitation. When the following message appears, please wait until the display changes.

[CIRCULATING INK]

In order to allow the automatic maintenance such as above to be performed, please observe the items below.

- Leave the main power on at all times.
- Never leave the front cover open for long periods.
- After making the settings for the various menu items, go back to the top screen.

## When Dot Drop-out Etc. Cannot be Corrected

When using metallic silver ink and white ink, ink discharge may become unstable (resulting in dot drop-out, etc.) if the machine is left unattended for a long period. This is due to the properties of metallic silver ink and white ink containing ingredients which tend to settle and separate, which will cause the precipitated ingredients to solidify when the machine is left unattended for a long period. In such cases, perform "ink renewal" menu. For information on how to operate the "ink renewal" menu, refer to the User's Manual.

☞ "User's Manual" ("When Problems Such As Dot Drop-out are not cleared up")

If the problems, such as dot drop-out, cannot be corrected even after performing cleaning above, then contact your authorized Roland DG Corp. dealer or us.



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